Wise, Barbara K

From: Cameron.Craig@epamail.epa.gov
Sent: Tuesday, December 14, 2004 10:14 AM
To: Wise, Barbara K
Cc: Bond, Rick; Leary, Kevin D
Subject: Fw: Alternatives Evaluated for the 221-U Facility (Canyon Disposi tion Initiative)

Third one.
----- Forwarded by Craig Cameron/R10/USEPA/US on 12/14/2004 10:12 AM

"Rinne, Calvin A" <Calvin_A_Rinne@rl.gov> — 12/14/2004 09:09 AM

To: Craig Cameron/R10/USEPA/US@EPA
cc: "Rinne, Calvin A" <Calvin_A_Rinne@rl.gov>
Subject: FW: Alternatives Evaluated for the 221-U Facility (Canyon Disposi tion Initiative)

It was my understanding from the 200 Area End State Workshop held August 10 and 11, 2004, that the stakeholders were willing to consider ensuring long term roof integrity, then sealing the canyons and allowing them to stand (uncovered) as monuments. This alternative should be included.

Regards,
Calvin Rinne

-----Original Message-----
From: Wise, Barbara K
Sent: Monday, December 13, 2004 3:43 PM
To: HANFORD-INFO@listserv.wa.gov
Subject: TPA: Alternatives Evaluated for the 221-U Facility (Canyon Disp osition Initiative)

This is a message from the Tri-Party Agencies

ALTERNATIVES EVALUATED FOR THE 221-U FACILITY

(CANYON DISPOSITION INITIATIVE)

The U.S. Department of Energy, Washington State Department of Ecology, and the U.S. Environmental Protection Agency (Tri-Party Agreement

agencies) would like your input on the 221-U Facility Proposed Plan. This document summarizes the cleanup alternatives evaluated and identifies the preferred cleanup alternative for the 221-U Facility.

Background

The U Plant Area is located in the 200 Area (Central Plateau) of the Hanford Site. It is approximately one-half mile square and consists of the U Plant Canyon Building (221-U Facility), ancillary facilities that supported the Canyon, soil waste sites, underground pipelines, and the groundwater underneath the area. The 221-U Facility Proposed Plan is the second in a series of U Plant Area remedial and/or removal action documents on which the public will be asked to comment. (In September 2004, the U Plant Ancillary Facilities Engineering Evaluation/Cost Analysis underwent public review.) Other EE/CAs and Proposed Plans are expected to be out for public review in the coming months.

The 221-U Facility is one of three chemical separation plants constructed in the 1940s to support plutonium production at the Hanford Site. This facility is approximately 800 ft long, 60 ft wide and is 70 ft high with 50 ft visible above ground level. Although originally built to extract plutonium from irradiated fuel rods, it was never used for this purpose. Instead, the 221-U Facility was used to train B and T plant operators until 1952. At that time, it was converted to recover uranium. The facility was also used to store failed or spare equipment from the other canyon facilities. . Some of this equipment was contaminated with radionuclides. Because of these activities, hazardous substances remain in the 221-U Facility and present a potential threat to human health and the environment.

What is the Canyon Disposition Initiative?

The Canyon Disposition Initiative (CDI) resulted from a 1996 Agreement in Principle among the Tri-Party agencies to determine the final disposition for Hanford's five canyon buildings. The purpose of the CDI is to evaluate disposition paths for the canyon buildings using Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) processes and to explore the potential for using the canyon buildings as disposal sites for Hanford cleanup waste, instead of demolishing structures and sending the resulting waste/debris to another disposal facility.

The 221-U Facility is the first canyon building to be addressed under the CDI. The process to disposition this facility is viewed as a pilot project to assist in the dispositioning of the remaining four canyon buildings. However, given the varying amounts, types, and locations of radiological contamination within the five canyon buildings, the complexity and cost associated with the implementation of this approach could vary significantly for each building, and the cleanup alternatives and the remedy selected for this facility may be different from those selected for the other canyon buildings. Any lessons learned from this CDI disposition will be captured and applied to the remaining four canyon buildings.

What cleanup alternatives were evaluated?

The Proposed Plan summarizes five alternatives that were evaluated. (A more detailed discussion of the evaluation of these alternatives can be found in the final Feasibility Study that is available at the USDOE Public Reading Room, Richland, Washington.) The alternatives are:

No Action: Leave the facility in its current state. No surveillance or maintenance would be performed.

Full Removal and Disposal: Completely demolish the facility and dispose of the resulting debris in the Environmental Restoration Disposal Facility. After removal, the site where the facility stood would be restored to a condition suitable for potential future industrial uses.

Entombment with Internal Waste Disposal: Dispose of Hanford cleanup wastes inside the facility and construct a surface barrier over the facility. Legacy wastes, which is waste currently inside the 221-U Facility, and waste from other Hanford Site cleanup projects would be grout encapsulated inside the concrete structure and covered with a surface barrier.

Entombment with Internal/External Waste Disposal: Dispose of Hanford cleanup wastes inside and outside of the facility and construct a surface barrier over the facility and external waste. Legacy wastes currently inside the 221-U Facility and waste from other Hanford Site cleanup projects would be grout encapsulated inside the concrete structure. Additional waste from other Hanford cleanup projects would be placed outside the canyon and serve as the base for the engineered surface barrier.

Close in Place - Partially Demolished Structure: Dispose of 221-U Facility legacy waste in the 221-U Facility process cells, fill the remaining void spaces with grout, demolish the building to the canyon deck level, and cover the partially demolished structure with a surface barrier. The final state would be grout-encapsulated legacy waste disposed inside the cells of the partially demolished structure below an engineered surface barrier.

Under the two entombment alternatives and the close-in-place alternative, the footprint (size) of the engineered barrier may vary, because the barrier constructed for the 221-U Facility under the selected alternative may also be considered as part of potential remedies for facilities, waste sites and/or pipelines that are associated with other CERCLA actions in the U Plant Area.

What is the preferred alternative?
The preferred alternative is to Close in Place - Partially Demolished Structure. Under the preferred alternative, the Tri-Parties do not anticipate bringing additional cleanup wastes to the 221 U Facility for disposal.

How you can become involved

A public comment period on the Proposed Plan for the 221-U Facility will run from December 13, 2004 through January 31, 2005. The Tri-Party agencies would like your feedback on this document and will consider all comments before finalizing it. No public meeting is scheduled at this time. To schedule a meeting, call the Hanford Cleanup Line (800-321-2008) or Craig Cameron (509-376-8665) by January 7, 2005.

Please submit comments to:

Craig Cameron
U.S. Environmental Protection Agency
Hanford Project Office
712 Swift Boulevard, Suite 5
Richland, WA 99352
Fax: (509) 376-2396
cameron.craig@epa.gov

To obtain a copy of the document call the Hanford Cleanup Line 1-800-321-2008. The Proposed Plan can be viewed on line at http://www.hanford.gov/calendar under the Public

Comment Period Section.

The document is also available for review at the Public Information Repositories listed below.

HANFORD PUBLIC INFORMATION REPOSITORY LOCATIONS

Portland

Portland State University

Branford Price and Miller Library
934 SW Harrison
Attn: Judy Andrews (503) 725-4126

Seattle
University of Washington
Suzzallo Library
Government Publications Division
Attn: Eleanor Chase (206) 543-4664

Richland
U.S. Department of Energy Public Reading Room
Washington State University, Tri-Cities
Consolidated Information Center, Room 101-L
2770 University Drive
Attn: Janice Parthree (509) 372-7443

Spokane
Gonzaga University
Foley Center
East 502 Boone
Attn: Linda Pierce (509) 323-6110

Information Repository web site address: http://www2.hanford.gov/arpir/